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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Stefan Geyer

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EXAMINER

MERED, HABTE

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,993

Applicant(s)

GEYER ET AL.

Examiner

Habte Mered

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahuja et al (US 6, 222, 837), hereinafter referred to as Ahuja, in view of Oyama et al (US 6, 188, 677), hereinafter referred to as Oyama.

Ahuja teaches enhanced Internet service over an ISDN line by eliminating from the D-Channel any packets that will introduce unacceptable delay in packets transmitted over the B-channel.

4. Regarding **claim 1**, Ahuja discloses a method for monitoring and, controlling the transmission capacity of a data transmission path which exists between two data devices (**See Figure 1, elements 101 and 103**) and is used for transmitting data signals, and on which a primary channel (**D-Channel 16 Kbytes/s**) with a relatively low transmission capacity is used, whose magnitude depends on influences which are outside the control of the two data devices, and which can be replaced or added to by one or more secondary channels (**B-Channels – 64 Kbytes/s**) having a relatively high transmission capacity comprising: emitting test signals (**i.e. link quality monitoring packets**) being transmitted at specific times or periodically via the primary channel,

where a delay time with which these test signals is transmitted being determined (**See Column 7:40-60**), emitting a signal which indicates that the primary channel is overloaded if a specific threshold value is exceeded (**See Column 7:45**) and, activating at least one secondary channel for signal transmission (**See Column 8:21-45**) wherein, forming a comparison result, in response to which a transmission capacity signal is formed (**See Column 7:60-67**), which corresponds to the comparison result and which can be used to activate of at least one secondary channel for signal transmission, monitoring of the transmission capacity is carried out deliberately, before transmission of the relevant data (**See Column 9:20-25**), when an amount of data is present which exceeds a defined amount threshold value and is to be transmitted by the first data device to the second data device (**See Column 10:31-55**), the time of starting of deliberate monitoring of the transmission capacity of the data transmission path is used as a point of origin for regular monitoring of the transmission capacity of the relevant data transmission path at time intervals of thereof and, no further deliberate monitoring of the transmission capacity of the data transmission path is carried out in a situation in which the time period which has passed since the last monitoring of the transmission capacity is shorter than a defined time period. (**See Column 12:8-28**) (**See also Figures 5 and 6**)

Ahuja fails to disclose a method of how the delay time is determined in that, in response to emitting the test signals, a response signal is sent back from a first one of the two data devices via the primary channel of the data transmission path to a second of the two data devices from the first data device in response to receiving the

relevant test signals, to the first data device via the primary channel of the data transmission path, which response signal either comprises the respective test signal, or is a separate signal which is thereby initiated, a time interval between the transmission of a test signal by the first data device and the arrival of a response signal which is sent back thereto from the second data device is compared with a predetermined threshold value time, which corresponds to a specific current transmission capacity of the primary channel of the data transmission path.

Oyama teaches a method and apparatus of measuring the traffic density of a telephone network.

Oyama discloses a method of how the delay time is determined (**See Figure 12**) in that, in response to emitting the test signals (**i.e. echo request and echo reply as seen in Figure 12 steps ST22 and ST24**), a response signal (**i.e. echo reply**) is sent back from a first one of the two data devices (**See Figure 3, any of the terminals can serve as the two data devices**) via the primary channel (**ISDN is used as illustrated in Column 2:33-39**) of the data transmission path to a second of the two data devices from the first data device in response to receiving the relevant test signals, to the first data device via the primary channel of the data transmission path, which response signal either comprises the respective test signal, or is a separate signal which is thereby initiated, a time interval between the transmission of a test signal by the first data device and the arrival of a response signal which is sent back thereto from the second data device. (**See also Column 8:62-67 and 9:1-15**)

It would have been obvious to one having ordinary skill in the art at the time the

invention was made to modify Ahuja's method of determining delay time involving test signals between two data devices establishing data transmission path. The motivation being a measure of the delay gives a good estimate of how heavy the traffic is on the transmission path as illustrated by Oyama in Column 8:62-63.

5. Regarding **claim 2**, Ahuja discloses a method, wherein the transmission of the respective test signal activates a timer, which emits an output signal once a defined time interval has elapsed, and in that, if the relevant output signal occurs before the arrival of the response signal, a transmission capacity signal is, emitted which indicates an overload state on data transmission path. **(See Column 7:20-40)**

6. Regarding **claim 3**, Ahuja discloses a method wherein the signals which are associated with a communication between the two data devices which is necessary for connection of a secondary channel are sent at the earliest possible time, in particular are transmitted with priority over existing data. **(See Column 5:35-40; Column 10:1-5; and Column 12:45-50)**

7. Regarding **claim 4**, Ahuja discloses a method wherein, in an integrated service digital network (ISDN) in which a switched virtual channel (Switched Virtual Circuit) which in places runs within a D channel is used as the primary channel and at least one B channel is used as the secondary channel, message signals for a bandwidth allocation protocol are used to allocate the bandwidth and transmission capacity to be used before setting up a B channel, and is transmitted with priority over other data. **(See Figure 1, element 107 and**

Column 3:38-46 and 12:43-50)

8. Regarding **claim 5**, Ahuja teaches all aspects of the claimed invention as set forth in the rejection of claim 1 but fails to disclose a method, wherein the message signals EchoRequest and EchoReply of an Internet link control protocol are used as the test signal and response signal, respectively.

Oyama discloses a method, wherein the message signals EchoRequest and EchoReply of an Internet link control protocol are used as the test signal and response signal, respectively. **(See Figure 12 - i.e. echo request and echo reply as seen in Figure 12 steps ST22 and ST24)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ahuja's method of determining delay time involving test signals between two data devices establishing data transmission path wherein the message signals EchoRequest and EchoReply of an Internet link control protocol are used as the test signal and response signal, respectively. The motivation being a measure of the delay gives a good estimate of how heavy the traffic is on the transmission path as illustrated by Oyama in Column 8:62-63 and using such a testing mechanism helps in testing the most widely deployed network, the Internet.

9. Regarding **claim 6**, Ahuja discloses a method wherein, a first one of the at least two data devices which are connected to one another via a data devices which are connected to one another via a data transmission path has an associated monitoring device **(See Figure 4, element 315)** which allows a time

comparison to be carried out between a measurement time interval from the emission of a test signal from the relevant data device to the second data device until the arrival of a response signal from this other data device with a predetermined threshold value time (**See Column 5:54-67**), and the relevant monitoring device can emit a transmission capacity signal which corresponds to the respective time comparison result, in particular a report signal which indicates an overload state on the data transmission path, if the measurement time interval exceeds the relevant threshold value time (**See Column 7:60-67 and See also Figure 5 and 6**).

10. Regarding **claim 7**, Ahuja disclose a method wherein, characterized in that a timer (**since the Bonding Manager in Figures 3 and 4 measures delay time it is inherent for it to have a timer See also Column 5:25-55**) is connected to the monitoring device (**Bonding Manager in Figure 3 and 4**), which can be activated by the test signal, and emits an output signal to the relevant monitoring device once its operating time, which corresponds to an overload state of the data transmission path has elapsed, the monitoring device uses this output signal, if the response signal from the second data device has not yet arrived, to emit a report signal which indicates the overload state of the data transmission path. (**See Column 7:40-67**)


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HM
07-24-2006



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